



IDAHO DEPARTMENT
OF HEALTH AND WELFARE

DIVISION OF
ENVIRONMENTAL QUALITY

1410 North Hilton, Boise, ID 83706-1255, (208) 334-0502

Philip E. Batt, Governor

July 7, 1995

Paul Evans, Manager of Environmental Support
J.R. Simplot Company
P.O. Box 912
Pocatello, Idaho 83204

RE: J.R. Simplot Company-Don Siding Complex Tier II Operating Permit (#077-00006)
as Required by the Pocatello PM-10 State Implementation Plan (SIP)

Dear Mr. Evans:

In accordance with the requirements of the Pocatello PM-10 SIP, the Division of Environmental Quality (DEQ) is enclosing a copy of your PM-10 SIP Operating Permit (OP). The OP addresses operations of the J.R. Simplot-Don Siding Complex in Pocatello, Idaho. Public comments were received on the proposed Tier II OP during public comment period held from June 29, 1994, through July 29, 1994. On October 3, 1994, J.R. Simplot Company filed a petition for contested case for a portion of the OP issued on August 29, 1994. On May 30, 1995, representatives from Simplot Company, DEQ, and the Idaho Deputy Attorney General met and discussed the issues that were raised by Simplot in their contested case of the OP. On June 27, 1995, the Idaho Deputy Attorney General received a letter from Simplot Company in which the company agreed to resolve some issues in the contested case. As a result of this agreement, Simplot dismissed the contested case of the OP.

Based on the information and the requirements of the Pocatello PM-10 SIP and comments received, DEQ finds this Tier II OP meets the provisions of IDAPA 16.01.01.400 (Rules for the Control of Air Pollution in Idaho). Therefore, I am pleased to enclose your Tier II OP #077-00006 for the Simplot facility-Don Siding Complex.

Please be advised that this operating permit is subject to permit application fees of five hundred dollars (\$500.00) in accordance with IDAPA 16.01.01.470. IDAPA 16.01.01.470 became effective on March 7, 1995. Information regarding the permit application fees will be sent to you shortly.

If you have any questions regarding the terms or conditions of the enclosed permit, please contact Brian R. Monson, Chief, Operating Permits Bureau, at (208) 334-5898.

Sincerely,

Orville D. Green
Orville D. Green
Assistant Administrator
Permits and Enforcement

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Enclosures

cc: A. Cole, SEIRO
D. Cole, EPA-IOO
R. Elkins, SERIO
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IDAHO DEPARTMENT
OF HEALTH AND WELFARE

DIVISION OF
ENVIRONMENTAL QUALITY

1410 North Hilton, Boise, ID 83706-1255, (208) 334-0502

Philip E. Batt, Governor

June 30, 1995

MEMORANDUM

TO: Dave Sande, Accountant Supervisor
Support Services

FROM: Harbi Elshafei, Air Quality Engineer *Harbi:*
Operating Permits Bureau (OPB)
Permits and Enforcement

SUBJECT: Permit Application Fees for Tier II Permit

The following facility has been reviewed for compliance with IDAPA §16.01.01.470 "Permit Application Fees for Tier II Permits":

J.R. Simplot Company/Don Siding Complex

In accordance with the requirements of the Pocatello PM-10 SIP, DEQ has released the facility's Tier II Operating Permit. According to IDAPA 16.01.01.470, the facility is subject to permit application fees for Tier II Permits of:

Five Hundred Dollars and No Cents (\$500.00)

The contact and mailing address for the above facility is:

COMPANY CONTACT: Paul Evans, Manager of Environmental
COMPANY ADDRESS: J.R. Simplot Company
P.O. Box 912
Pocatello, Idaho 83204

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cc: S. Richards, DEQ
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J. Palmer, SWIRO

July 7, 1995

MEMORANDUM

TO: Orville Green, Assistant Administrator
Permits and Enforcement

FROM: Harbi Elshafei, Air Quality Engineer *Harbi*
Operating Permits Bureau

THROUGH: Sue Richards, Air Quality Permit Manager *Sue*
Operating Permits Bureau

Brian R. Monson, Chief *Monson*
Operating Permits Bureau

SUBJECT: Issuance of Tier II Operating Permit for
J.R. Simplot Company in Pocatello, Idaho

PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 16.01.01 Sections 400 through 406 (Rules for the Control of Air Pollution in Idaho) for issuing Operating Permits (OP).

PROJECT DESCRIPTION

In order to implement the control strategies developed for the Pocatello PM-10 SIP, new PM-10 emission limits have been established for J. R. Simplot's Operating Permit. In addition, PM-10 sources which are no longer operating have been removed from the OP. DEQ, Simplot, and EPA/Region 10 staff were involved in evaluating and establishing Simplot's PM-10 limits.

SUMMARY OF EVENTS

The project was presented to the Operating Permits Bureau on November 29, 1993. The purpose was to incorporate the limits defined by the Pocatello PM-10 SIP into J. R. Simplot's OP. On August 29, 1994, a Tier II OP was issued to the facility. Simplot contested a portion of the OP on October 3, 1994. On June 27, 1995, Simplot Dismissed the contested case, based on agreement with DEQ to resolve some issues in the contested case.


The permitting of the other industries involved in the Pocatello control strategies (FMC and Bannock Paving) is being handled by EPA/Region 10.

RECOMMENDATIONS

The Bureau staff have reviewed the Pocatello SIP documentation concerning the new PM-10 limits for J. R. Simplot. Based on state and federal regulations concerning the issuance of revised Operating Permits and public comment received, the Bureau staff recommend that J. R. Simplot in Pocatello be issued a Tier II Operating Permit in accordance with Section IDAPA 16.01.01.400 Rules for the Control of Air Pollution in Idaho. Staff also recommends that the facility be notified in writing of the obligation to pay permit application fees for Tier II permits.

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cc: A. Cole, SEIRO
R. Elkins, SEIRO
Source File
COF 1.1

STATE OF IDAHO AIR POLLUTION OPERATING PERMIT GENERAL INFORMATION	PERMIT NUMBER <div style="display: flex; align-items: center; gap: 10px;"> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> <div style="font-size: 1.2em;">-</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">6</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div style="text-align: center;"> AQCR <div style="border: 1px solid black; padding: 2px 5px;">0</div> <div style="border: 1px solid black; padding: 2px 5px;">6</div> <div style="border: 1px solid black; padding: 2px 5px;">1</div> </div> <div style="text-align: center;"> CLASS <div style="border: 1px solid black; padding: 2px 5px;">A</div> <div style="border: 1px solid black; padding: 2px 5px;">1</div> </div> <div style="text-align: center;"> SIC <div style="border: 1px solid black; padding: 2px 5px;">2</div> <div style="border: 1px solid black; padding: 2px 5px;">8</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <div style="text-align: center;"> ZONE <div style="border: 1px solid black; padding: 2px 5px;">1</div> <div style="border: 1px solid black; padding: 2px 5px;">2</div> </div> <div style="text-align: center;"> UTM COORDINATE (km) <div style="border: 1px solid black; padding: 2px 5px;">3</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> <div style="border: 1px solid black; padding: 2px 5px;">5</div> <div style="border: 1px solid black; padding: 2px 5px;">6</div> <div style="border: 1px solid black; padding: 2px 5px;">4</div> <div style="border: 1px solid black; padding: 2px 5px;">7</div> <div style="border: 1px solid black; padding: 2px 5px;">5</div> <div style="border: 1px solid black; padding: 2px 5px;">1</div> <div style="border: 1px solid black; padding: 2px 5px;">6</div> </div> </div>	
1. PERMITTEE J. R. Simplot Company - Don Siding Complex, Minerals & Chemical Group		
2. PROJECT PM-10 SIP Operating Permit		
3. ADDRESS P.O. Box 912	TELEPHONE # (208) 232-6620	COUNTY Power
4. CITY Pocatello	STATE Idaho	ZIP CODE 83204
5. PERSON TO CONTACT Paul Evans	TITLE Manager of Environmental Support	
6. EXACT PLANT LOCATION Section 18 R34E, T6S; 5 $\frac{1}{2}$ Section 7 R34E T6S		
7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS Manufacture of Nitrogen, Phosphate and Sulfate Commercial Chemical Products		
8. GENERAL CONDITIONS This permit is issued according to the Rules for the Control of Air Pollution in Idaho, Section 16.01.01.400 and pertains only to emissions of air contaminants which are regulated by the State of Idaho and to the sources specifically allowed to be operated by this permit. THIS PERMIT HAS BEEN GRANTED ON THE BASIS OF DESIGN INFORMATION PRESENTED WITH ITS APPLICATION AND THE PM-10 STATE IMPLEMENTATION PLAN EMISSION INVENTORY. CHANGES IN DESIGN OR EQUIPMENT, THAT RESULT IN ANY CHANGE IN THE NATURE OR AMOUNT OF EMISSIONS, MAY BE A MODIFICATION. MODIFICATIONS ARE SUBJECT TO DEPARTMENT REVIEW IN ACCORDANCE WITH Section 16.01.01.200 OF THE Rules for the Control of Air Pollution in Idaho.		
<div style="text-align: center;">  ASSISTANT ADMINISTRATOR DIVISION OF ENVIRONMENTAL QUALITY </div>		<div style="text-align: right;"> ISSUED June 29, 1995 Date EXPIRES June 29, 2000 Date </div>

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Wet Process Phosphoric Acid Plant #400 Stack

1. SOURCE DESCRIPTION

- 1.1 Process Description The process involves transferring ore slurry and process water to the phosphoric acid digesters, reacting the ore slurry with sulfuric acid, and filtering the resulting reaction mass to recover liquid phosphoric acid. Ore slurry is transferred to the acid plant digesters, where liquid sulfuric acid and recycled liquid phosphoric acid and process water are added. The liquid phosphoric acid is filtered and then concentrated in evaporators. The liquid phosphoric acid product is piped from the evaporators to storage tanks. Gypsum precipitate is rinsed and removed to a stockpile.
- 1.2 Controls Emissions from the digesters are reduced by being inside the Phosphoric Acid Plant Building and are vented to a Davy-McKee Scrubber and then through one stack. Emissions from the evaporators and filters are reduced by being inside the Phosphoric Acid Plant Building and are vented to the belt filter scrubber and then through the same stack through which the Davy-McKee Scrubber is vented.

2. EMISSION LIMITS2.1 Wet Process Phosphoric Acid Plant #400 Stack

- 2.1.1 Particulate and Particulate Matter with an aerodynamic diameter less than ten microns (PM-10) emissions shall not exceed the emission limits set by IDAPA 16.01.01.702, or the pound per hour value (whichever is more restrictive), or ton per year value given in Appendix A of this permit.
- 2.1.2 Total fluoride (i.e., particulates and gaseous) emissions shall not exceed 0.020 pounds per ton of equivalent P_2O_5 feed, as required in 40 CFR 60.202, or the pound per hour value (whichever is more restrictive), or ton per year value given in Appendix A of this permit.
- 2.1.3 Radionuclide emissions shall not exceed the curies per year (Ci/yr) value given in Appendix A of this permit.
- 2.1.4 Total reduced sulfur emissions, as sulfur, shall not exceed the pound per hour or ton per year values given in Appendix A of this permit.
- 2.1.5 Visible emissions shall not exceed 20% opacity for more than three (3) minutes aggregate in any 60-minute period, as required in IDAPA 16.01.01.625, and as determined using the Department's "Procedures Manual for Air Pollution Control."

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

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AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Wet Process Phosphoric Acid Plant #400 Stack (Continued)

3. MONITORING AND OPERATING REQUIREMENTS

- 3.1 Maintenance to a scrubber and/or process maintenance shall be performed, if visible emissions from the scrubber stack exceed 15% opacity. This maintenance opacity applies to all the scrubbers described in this process.
- 3.2 The permittee shall maintain an emission control equipment maintenance log, which will be made available to inspectors on request.
- 3.3 Monitoring requirements for the sources in this section are listed in the Monitoring, Reporting, and Special Studies Section of this permit.

4. INSTALLATION REQUIREMENTS

- 4.1 If needed, the permittee shall install and maintain indicators which measure:
 - 4.1.1 Static pressure drop across all baghouses and scrubbers listed in this section.
 - 4.1.2 Scrubbing fluid flow rate (gpm) to each scrubber.
- 4.2 Fugitive Emissions Uncaptured fugitive PM-10 shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 16.01.01.651, and shall not exceed the pound per hour (lb/hr) and ton per year (T/yr) values given in Appendix B of this permit.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

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AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Granulation III Stack

1. SOURCE DESCRIPTION

- 1.1 Process Description This process involves transferring dry feed stock to the Granulation III Plant, making phosphates of different grades and transferring these products to storage and loadout. Dry feed stock is transferred to the Granulation III Plant reactor, where phosphoric acid, sulfuric acid, ammonia, and other materials are reacted to produce phosphate products. Phosphate products from the reactor are transferred to the dryer and then to the cooler. Phosphate product transfers to the product belt conveyor, which dumps to the product stockpile. Product is transferred by loader to the reclaimer hopper, which feeds the shipping elevator. Product from the elevators is fed through chutes into trucks and railcars.
- 1.2 Controls Emissions from the dryer and the transfers associated with getting the dry feed stock to the dryer are reduced by being inside the Granulation Building and are vented to cyclone, a cyclonic scrubber, and an Entoleter Scrubber (in series), and then to the granulation stack (common to the other Granulation III Plant control equipment). Emissions from the reactor and cooler are reduced by being inside the Granulation Building and are vented to a Venturi Scrubber and then the stack. Alternatively, emissions from the cooler can be vented to the dryer furnace as preheated air. Emissions from the transfers, associated with getting the product from the dryer to the product belt conveyor, are reduced by being inside the Granulation Building and are vented to the Granulation III Plant Baghouse, and then through one stack (common with the other Granulation III Plant control equipment). Emissions from the product stockpile and from the transfers, associated with getting the product from the product belt conveyor to the product stockpile and from the product stockpile to the elevator, are reduced by being inside the Granulation Building. Emissions from the transfers, associated with getting the product from the elevator to the trucks and railcars, are wind protected.

2. EMISSION LIMITS2.1 Granulation III Stack

- 2.1.1 Particulate, PM-10, total fluorides (i.e., particulate and gaseous), carbon monoxide (CO), and nitrogen oxide (NO_x) emissions shall not exceed the pound per hour (lb/hr) or ton per year (T/yr) values given in Appendix A of this permit.
- 2.1.2 Radionuclide emissions shall not exceed the curies per year (Ci/yr) value given in Appendix A of this permit.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

ME-W-SIMPLT/JRSM/PER

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Granulation III Stack (Continued)

2.1.3 Visible emissions shall not exceed 20% opacity for more than three (3) minutes aggregate in any 60-minute period, as required in IDAPA 16.01.01.625 and as determined using the Department's "Procedures Manual for Air Pollution Control."

2.2 Fugitive Emissions

2.2.1 Fugitive particulate, PM-10, and total fluoride (i.e., particulate and gaseous) emissions shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 16.01.01.651, and shall not exceed the pound per hour (lb/hr) and ton per year (T/yr) values given in Appendix B of this permit.

2.2.2 Fugitive radionuclide emissions shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 16.01.01.651, and shall not exceed the curies per year (Ci/yr) value given in Appendix B of this permit.

3. MONITORING AND OPERATING REQUIREMENTS

- 3.1 Maintenance to the scrubbers, and/or process maintenance, and/or baghouse shall be performed if visible emissions from the granulator stack exceed 15% opacity.
- 3.2 The permittee shall maintain an emission control equipment maintenance log, which will be made available to inspectors on request.
- 3.3 Monitoring requirements for the sources in this section are listed in the Monitoring, Reporting, and Special Studies Section of this permit.

4. INSTALLATION REQUIREMENTS

- 4.1 If needed, the permittee shall install and maintain indicators which measure:
 - 4.2.1 Static pressure drop across all baghouses and scrubbers.
 - 4.2.2 Scrubbing fluid flow rate to each scrubber.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

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AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Granulation I Scrubber Stacks (2) and Baghouse Stack

1. SOURCE DESCRIPTION

- 1.1 Process Description This process involves making granular phosphate and transferring it to storage and loadout. Recycled phosphate, sulfates, and other reject materials are transferred to the reactor where phosphoric acid, sulfuric acid, and ammonia are added. The reactor transfers the mixture to the granulator, the dryer, and then to screens. From the screens, the product is transferred to a cooler. Product is transferred from the cooler to the product belt conveyors, which dump to the product stockpile. Product is transferred by loader from the product stockpile to the reclaim hopper, which feeds the loadout belt conveyor. Product transfers from the loadout belt to a bucket elevator and then to cross-belts, which fill trucks and railcars through chutes.
- 1.2 Controls Emissions from the reactor, and granulator, and from the transfers, associated with getting the material from the granulator to the first belt conveyor, are reduced by being inside the building and are vented to the reactor/granulator scrubber (Venturi Scrubber No. 1), which vents to one stack. Emissions from the dryer are reduced by being inside the building and are vented to the dryer scrubber (Venturi Scrubber No. 2), which vents to one stack. Emissions from the cooler are vented to a baghouse. From the baghouse, the emissions are vented to the stack and/or dryer for use as combustion air. Emissions from the transfers, associated with getting the material from the first belt conveyor to the last belt conveyor, before the stockpile and product screens are reduced by being inside the building, and are vented to the Granulation I Baghouse, which vents to one stack. Emissions from the product stockpile and from the transfers, associated with getting the material from the stockpile to the cross-belts, are reduced by being inside the building. Emissions from the transfers, associated with getting the material from the cross-belts to the trucks and railcars, are wind protected.

2. EMISSION LIMITS2.1 Granulation I Scrubber Stacks (2) and Baghouse Stack

- 2.1.1 Particulate, PM-10, total fluoride (i.e., particulates and gaseous), carbon monoxide (CO), nitrogen oxides (NO_x), and sulfur dioxide (SO₂) emissions shall not exceed the pound per hour (lb/hr) or ton per year (T/yr) values given in Appendix A of this permit.
- 2.1.2 Radionuclide emissions shall not exceed the curies per year (Ci/yr) value given in Appendix A of this permit.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HE-30-SIMPLOT/JR/SALPER

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Granulation I Scrubber Stacks (2) and Baghouse Stack (Continued)

2.1.3 Visible emissions shall not exceed 20% opacity for more than three (3) minutes aggregate in any 60-minute period, as required in IDAPA 16.01.01.625 and as determined using the Department's "Procedures Manual for Air Pollution Control."

2.2 Fugitive Emissions

2.2.1 Fugitive particulate, PM-10, and total fluoride (i.e., particulates and gaseous) emissions from this process shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 16.01.01.651 and shall not exceed the pound per hour (lb/hr) or ton per year (T/yr) values given in Appendix B of this permit.

2.2.2 Fugitive radionuclide emissions from this process shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 16.01.01.651 and shall not exceed the curie per year (Ci/yr) values given in Appendix B of this permit.

3. MONITORING AND OPERATING REQUIREMENTS

3.1 Maintenance to a scrubber and/or process maintenance shall be performed, if visible emissions from the scrubber stack exceed 15% opacity. This applies to both scrubbers described in this process.

3.2 The permittee shall maintain an emission control equipment maintenance log, which shall be made available to inspectors on request.

3.3 Maintenance to the baghouse shall be performed, if visible emissions from the baghouse stack exceed 10% opacity.

3.4 Monitoring requirements for the sources in this section are given in the Monitoring, Reporting and Special Studies Section of this permit.

4. INSTALLATION REQUIREMENTS

4.1 If needed, the permittee shall install and maintain indicators which measure:

4.1.1 Static pressure drop across all baghouses and scrubbers listed in this section.

4.1.2 Scrubbing fluid flow rate (gpm) to each scrubber.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Granulation II Scrubber Stack and Baghouse Stack

1. SOURCE DESCRIPTION

- 1.1 Process Description This process involves making phosphate and transferring it to storage and loadout. Recycled phosphates, sulfates, and other reject materials are transferred to the reactor where phosphoric acid, sulfuric acid and ammonia are added. The reactor transfers the mixture to the granulator, the dryer, and then to the cooler (in series). Product is transferred from the cooler to the product belt conveyors, which dump to the product stockpile. Product is transferred by loader from the product stockpile to the reclaim hopper, which feeds the loadout belt conveyor. Product transfers from the loadout belt to a bucket elevator and then to cross-belts, which fill trucks and railcars through chutes.
- 1.2 Controls Emissions from the reactor, and granulator, and from the transfers, associated with getting the material from the granulator to the first belt conveyor, are reduced by being inside the building and are vented to the reactor/granulator (Venturi Scrubber No. 1). Emissions from the dryer are reduced by being inside the building and are vented to a cyclone and dryer scrubber (Venturi Scrubber No. 2). Emissions from Venturi Scrubbers No. 1 and 2 are vented to a tail gas scrubber (i.e., cyclonic scrubber and mist eliminator in series) and through one stack. Emissions from the cooler are reduced by being inside the building and are vented to the ammonium phosphate plant No. 200 cooler baghouse. The baghouse effluent is supplied to the dryer burner as combustion air. Emissions from the transfers associated with getting the material from the first belt conveyor to the last belt conveyor before the stockpile are reduced by being inside the building and are vented to the Granulation II vent baghouse. When the combustion air demand for the dryer burner exceeds the amount supplied by the cooler baghouse effluent, the vent baghouse effluent is used to make up the difference. That portion of the vent baghouse effluent not supplied to the burner is vented through a stack to the atmosphere. Emissions from the product stockpile and from the transfers associated with getting the material from the stockpile to the cross-belts are reduced by being inside the building. Emissions from the transfers associated with getting the material from the cross-belts to the trucks and railcars through chutes, are wind protected.

2. EMISSION LIMITS2.1 Granulation II Scrubber Stack and Baghouse Stack

- 2.1.1 Particulate, PM-10, total fluoride (i.e., particulates and gaseous), carbon monoxide (CO), nitrogen oxides (NO_x), and sulfur dioxide (SO₂) emissions shall not exceed the pound per hour (lb/hr) or ton per year (T/yr) values given in Appendix A of this permit.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HE34-SIMPLOTJRBH.PEF

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Granulation II Scrubber Stack and Baghouse Stack

2.1.2 Radionuclide emissions shall not exceed the curie per year (Ci/yr) value given in Appendix A of this permit.

2.1.3 Visible emissions shall not exceed 20% opacity for more than three (3) minutes aggregate in any 60-minute period, as required in IDAPA 16.01.01.625 and as determined using the Department's "Procedures Manual for Air Pollution Control."

2.2 Fugitive Emissions

2.2.1 Fugitive particulate, PM-10, and total fluoride (i.e., particulate and gaseous) emissions from this process shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 16.01.01.651 and shall not exceed the pound per hour (lb/hr) or ton per year (T/yr) values given in Appendix B of this permit.

2.2.2 Fugitive radionuclide emissions from this process shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 16.01.01.651 and shall not exceed the curie per year (Ci/yr) values in Appendix B of this permit.

3. MONITORING AND OPERATING REQUIREMENTS

3.1 Maintenance to a scrubber and/or process maintenance shall be preformed, if visible emissions from the scrubber stack exceed 15% opacity.

3.2 Maintenance to a baghouse shall be performed, if visible emissions from the baghouse stack exceed 10% opacity.

3.3 The permittee shall maintain an emission control equipment maintenance log, which will be made available to inspectors on request.

3.4 Monitoring requirements for the sources in this section are given in the Monitoring, Reporting, and Special Studies Section of this permit.

4. INSTALLATION REQUIREMENTS

4.1 If needed, the permittee shall install and maintain indicators which measure:

4.1.1 Static pressure drop across all baghouses and scrubbers listed in this section.

4.1.2 Scrubbing fluid flow rate (gpm) to each scrubber.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HEJH-SIMPLOT/PSM.PER

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Ammonium Sulfate Plant Scrubber Stacks

1. SOURCE DESCRIPTION

1.1 Process Description This process involves making crystalline ammonium sulfate and transferring it to storage and loadout. Recycled Ammsox scrubber liquor is transferred to the reactor, where sulfuric acid and ammonia are added. Crystallized ammonium sulfate, formed in the reactor, is removed from the mother liquor by a centrifuge and then transferred to a dryer and cooler. Product is transferred from the cooler to the product belt conveyors, which dump to the product stockpile. Product is transferred by loader from the product stockpile to the reclaim hopper, which feeds the bucket elevator. Bucket elevator chutes feed product into trucks and railcars.

1.2 Controls Emissions from the dryer and from the transfers, associated with getting the material from the dryer to the last belt conveyor before the stockpile, are reduced by being inside the building and are vented to a Venturi Scrubber and then to the dryer scrubber and then through one stack. Emissions from the reactor are controlled by being under vacuum and fed to a barometric condenser. Emissions from the cooler are reduced by being inside the building and are vented to the cooler venturi scrubber, and then through one stack. Emissions from the product stockpile and from the transfers, associated with getting the material from the last belt conveyor before the stockpile to the stockpile and from the stockpile to the bucket elevator, are reduced by being inside the building. Emissions from the transfers, associated with getting the material from the bucket elevator to the trucks and railcars through chutes, are wind protected.

2. EMISSION LIMITS2.1 Ammonium Sulfate Plant Scrubber Stacks

2.1.1 Particulate, PM-10, nitrogen oxides (NO_x), carbon monoxide (CO), and sulfur dioxide (SO₂) emissions shall not exceed the pound per hour (lb/hr) or ton per year (T/yr) values given in Appendix A of this permit.

2.1.2 Visible emissions shall not exceed 20% opacity for more than three (3) minutes aggregate in a 60-minute period, as required in IDAPA 16.01.01.625 and as determined using the Department's "Procedures Manual for Air Pollution Control."

2.2 Fugitive Emissions

2.2.1 Fugitive particulate and PM-10 emissions from this process shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 16.01.01.651 and shall not exceed the pound per hour (lb/hr) or ton per year (T/yr) value given in Appendix B of this permit.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HE-14-SIMPLOT/ABM/PER

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Ammonium Sulfate Plant Scrubber Stacks

3. MONITORING AND OPERATING REQUIREMENTS

- 3.1 Maintenance to the scrubber and/or process maintenance shall be performed, if the scrubber stack visible emissions exceed 15% opacity.
- 3.2 The permittee shall maintain an emission control equipment maintenance log, which will be made available to inspectors on request.
- 3.3 Monitoring requirements for the sources in this section are given in the Monitoring, Reporting, and Special Studies Section of this permit.

4. INSTALLATION REQUIREMENTS

- 4.1 If needed, the permittee shall install and maintain indicators which measure:
 - 4.1.1 Static pressure drop across all baghouses and scrubbers listed in this section.
 - 4.1.2 Scrubbing fluid flow rate (gpm) to each scrubber.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HE-34-SIMPLOTJRM.PER

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Superphosphoric Acid Plant and Associated Handling

1. SOURCE DESCRIPTION

- 1.1 Process Description This process involves making superphosphoric acid and ammoniated liquid fertilizer and transferring these products to storage and loadout. Liquid phosphoric acid is concentrated in three (3) vacuum evaporators to make superphosphoric acid. The superphosphoric acid can also be transferred to a pipe reactor to produce an ammoniated liquid fertilizer. These products are piped to product storage tanks.
- 1.2 Controls Emissions from the evaporators and reactor are controlled by the use of noncontact barometric condensers.

2. EMISSION LIMITS2.1 Process Emissions

- 2.1.1 Fugitive emissions of total fluorides (as defined in 40 CFR 60.211(b)) from this process shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 16.01.01.651, and shall not exceed 0.010 pound per ton of equivalent P_2O_5 feed as required in 40 CFR 60.212, and as determined using the methods specified in 40 CFR 60.213 and 60.214. Annual emissions of total fluorides (as defined in 40 CFR 60.211(b)) from this process shall not exceed the ton per year value given in Appendix B in this permit.

3. MONITORING REQUIREMENTS

- 3.1 Flow-monitoring devices shall be installed, calibrated, maintained and operated to determine the mass flow rate of phosphorus-bearing feed material to the process. The flow-monitoring devices shall have the accuracy of +/- 5% over the actual operating range.
- 3.2 Equivalent P_2O_5 feed rate shall be calculated by multiplying the percent P_2O_5 content, as measured by the Spectrophotometric Molybdovanado Phosphate Method (AOAC Method #9), times the total mass rate of phosphorus-bearing feed.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HEJH-SIMPLTJNSM.PER

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Superphosphoric Acid Oxidation (Extended Absorption Scrubber)

1. SOURCE DESCRIPTION

- 1.1 Process Description This process involves treating superphosphoric acid (SPA) with nitric acid to restore the brilliant green color of the product through oxidation. Nitric acid is reduced to oxides of nitrogen and water and the organics in the SPA are oxidized. The oxides of nitrogen in the off gases are pressurized and absorbed in a dilute aqueous solution of nitric acid.

Two absorption towers are used in series. Sufficient reaction time and reaction conditions are maintained in the extended absorber system to convert NO to NO₂ and continue to absorb NO₂ as nitric acid.

- 1.2 Controls Nearly all NO_x emission is reacted in the extended water based scrubber system and collected as nitric acid. An extended absorption tower with packing material in the column is used to control NO_x emissions. There are no potential toxic chemicals and no waste stream for disposal. No particulate emissions will occur or are expected to occur while the equipment is functioning normally.

2. EMISSION LIMITS

- 2.1 Oxides of nitrogen (NO_x) shall not exceed the pound per hour (lb/hr) and ton per year (T/yr) values listed in Appendix A.
- 2.2 Carbon monoxide (CO) emissions shall not exceed the pound per hour (lb/hr) and ton per year (T/yr) values listed in Appendix A.

3. OPERATING REQUIREMENTS

- 3.1 Maintenance on the extended absorber scrubber shall be performed when visible emissions from the extended absorption scrubber system exceed ten (10) percent opacity for more than three (3) minutes aggregate in any sixty (60) minute period, as determined using the Department's "Procedure Manual for Air Pollution Control".

4. REPORTING REQUIREMENTS

- 4.1 The permittee shall report opacity exceedances and corresponding maintenance plans to the Department in a Calendar-Quarterly Report. The Calendar-Quarterly Report shall be received by the Department no later than thirty (30) days after each calendar quarter.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

NEJH-SIMPLET/ASMA.PEN

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Ammonia Plant and Associated Handling

1. SOURCE DESCRIPTION

1.1 Process Description This process involves making anhydrous ammonia and transferring it to storage and loadout. Hydrogen is formed by steam-decomposition of natural gas. Ammonia is produced by a catalytic reaction of hydrogen and atmospheric nitrogen. Product is transferred by pipe to the product storage tanks.

1.2 Controls Emissions from the processes are vented to various stacks.

2. EMISSION LIMITS2.1 Ammonia Plant Stacks

2.1.1 Particulate, PM-10, carbon monoxide (CO), nitrogen oxides (NO_x), volatile organic compounds (VOC), and sulfur dioxide (SO₂) emissions shall not exceed the pound per hour (lb/hr) and ton per year (T/yr) values listed in Appendix A of this permit.

2.1.2 Visible emissions shall not exceed 20% opacity for more than three (3) minutes aggregate in any 60-minute period, as required in IDAPA 16.01.01.625 and as determined using the Department's "Procedures Manual for Air Pollution Control."

3. MONITORING AND OPERATING REQUIREMENTS

3.1 Monitoring requirements for the sources in this section are listed in the Monitoring, Reporting, and Special Studies Section of this permit.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Nitric Acid and Nitrogen Solutions Plant and Associated Handling

1. SOURCE DESCRIPTION

1.1 Process Description This process involves making liquid nitric acid, urea, and several grades of fertilizer. Nitric acid is made by the combustion of ammonia in air and the subsequent absorption of the combustion products in water. Urea is produced from the reaction of carbon dioxide with ammonia. Several grades of fertilizer are made by blending ammonia, nitric acid, and urea in aqueous mixtures.

1.2 Controls Emissions from the processes are vented to various stacks.

2. EMISSION LIMITS2.1 Nitric Acid Plant Stack

2.1.1 Oxides of nitrogen (expressed as NO₂) emissions shall not exceed 3.0 pounds per ton of 100 percent (100%) nitric acid produced, as required in 40 CFR 60.72 and as determined using the methods specified in 40 CFR 60.74. Oxides of nitrogen emissions shall also not exceed the ton per year (T/yr) values given in Appendix A of this permit.

2.1.2 Visible emissions shall not exceed ten percent (10%) opacity, as required in 40 CFR 60.72 and as determined using U.S. EPA Reference Method 9.

3. MONITORING AND OPERATING REQUIREMENTS

3.1 Fugitive emissions from this process shall be reasonably controlled by maintaining the control equipment and ventilation equipment system in good working condition, and as required in IDAPA 16.01.01.650 and 16.01.01.651.

3.2 The permittee shall install, calibrate, maintain, and operate a continuous emission monitoring system for the measurement of nitrogen oxides, as required in 40 CFR 60.73.

3.3 Other monitoring requirements for the sources in this section are listed in the Monitoring, Reporting, and Special Studies Section of this permit.

4. REPORTING REQUIREMENTS

4.1 Nitrogen oxides continuous emission monitoring data shall be submitted to the Department in a Calendar-Quarterly Report. The Calendar-Quarterly Report shall be received by the Department no later than thirty (30) days after each calendar quarter.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

NE-JR-SIMPLOT/NSM.PER

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

#300 Sulfuric Acid Plant and Associated Handling

1. SOURCE DESCRIPTION

- 1.1 Process Description This process involves making liquid sulfuric acid and transferring it to storage and loadout. The method used to make sulfuric acid is called the "single contact process." Liquid sulfur is burned to make sulfur dioxide, which is catalytically oxidized to sulfur trioxide. Liquid sulfuric acid is formed by absorbing the sulfur trioxide in water. Product is transferred by pipe to the product storage tanks.
- 1.2 Controls SO₂ emissions from the #300 Sulfuric Acid Plant are controlled by Ammsox scrubber and plant feed rates.

2. EMISSION LIMITS2.1 Sulfuric Acid Plant No. 300 Stack

- 2.1.1 Sulfur dioxide emissions shall not exceed 750 pounds per each running three-hour period, as determined by a U.S. EPA Reference Method 8, or Department-approved alternative emission test. Sulfur dioxide emissions shall also not exceed the ton per year (T/yr) value in Appendix A of this permit.
- 2.1.2 Sulfuric acid mist emissions shall not exceed 0.15 pounds per ton of 100 percent (100%) sulfuric acid produced as required in 40 CFR 60.83 and 9.4 pounds per hour, whichever is more restrictive, as determined by U.S. EPA Method 8, or Department-approved alternative emission test. Sulfuric acid mist emissions shall also not exceed the ton per year (T/yr) value given in Appendix A of this permit.
- 2.1.3 Visible emissions shall not exceed twenty percent 20% opacity for more than 3 minutes aggregate in any 60-minute period, as required in IDAPA 16.01.01.625 and as determined using the Department's "Procedures Manual for Air Pollution Control."

3. MONITORING AND OPERATING REQUIREMENTS

- 3.1 The production rate shall be determined during the tests required in Section 4 below. The maximum production during the following year shall not exceed 105% of the rate achieved during the tests unless the following conditions are met:
- 3.1.1 The SO₂ monitor is calibrated at least once every 24 hours using certified test gases, one of which has a SO₂ concentration equal or less than the expected stack gas SO₂ concentration, and one of which has a SO₂ concentration greater than the expected stack gas SO₂ concentration.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

NEP-SIMPLOTJRM-PER

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

#300 Sulfuric Acid Plant and Associated Handling (Continued)

- 3.1.2 The calibrated SO₂ monitor is cross-checked and agrees with the initial performance test, which demonstrates SO₂ emission limit compliance.
- 3.1.3 Prior written approval by the Department is received.
- 3.1.4 An emission test is performed at the requested increased emission rate, and the test demonstrates that the continuous emission monitor is accurate at the increased rate.
- 3.1.5 Sulfur dioxide and acid mist emission limits will not be violated at the requested increased emission rates.

4. MONITORING REQUIREMENTS

- 4.1 Annual sulfur dioxide and sulfuric acid mist emission tests shall be performed, using U.S. EPA Reference Methods 1, 2, 3, and 8, or Department-approved alternative methods. All emission tests shall be performed at the process equipment's maximum operating rate.
- 4.2 The permittee shall install, calibrate, maintain, and operate a continuous emission monitoring system for the measurement of sulfur dioxide, as described in 40 CFR 60.84 and 60.13. The accuracy of the monitoring results shall be in accordance with 40 CFR 60 Appendix B - Performance Specification 2.
- 4.3 Visible emissions shall be observed and recorded concurrently with the emission tests required in Section 4.1 above, using the methods specified in the Department's "Procedures Manual for Air Pollution Control."
- 4.4 The permittee shall operate the SO₂ Monitors S1 and S7 in their present locations, as specified in 40 CFR 50 and 40 CFR 58. For specific methods and quality control, follow EPA's "Quality Assurance Handbook for Air Pollution Measurement Systems."
- 4.5 Annual audits of the monitors performance will be conducted by the Idaho Division of Environmental Quality or other auditors approved by the Department. Audit results will be sent in writing to the Department within forty-five (45) days after the audit and will be performed in accordance with 40 CFR 58.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HE:ps-SIMPLOTJRSIM.PER

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

#300 Sulfuric Acid Plant and Associated Handling (Continued)

5. REPORTING REQUIREMENTS

- 5.1 The results of all emission tests and visible emission data shall be reported to the Department in the Calendar-Quarterly Report. The Calendar-Quarterly Report shall be received by the Department no later than thirty (30) days after each calendar quarter. Continuous emission monitoring data and the production rates, determined during the tests, shall be reported to the Department with the emission test data.
- 5.2 All three-hour block average sulfur dioxide emissions shall be reported in a Calendar-Quarterly Report. The Calendar-Quarterly Report shall be received by the Department no later than thirty (30) days after each calendar quarter.
- 5.3 All repairs or changes to the SO₂ Continuous Emission Monitoring System and any calibration problems shall be reported within seven (7) days and in the quarterly report.
- 5.4 The permittee shall maintain, on file for two (2) years, all ambient air pollution and meteorological monitoring data collected in the Don Siding Area.
- 5.5 The permittee shall submit to the Department for approval an annual source test protocol for the #300 Sulfuric Acid Plant. The test protocol shall be submitted for the annual test conducted during the calendar year 1995 and shall be submitted to the Department no later than thirty (30) days prior to the date the test is scheduled to begin. Once the annual test protocol is approved by the Department, the permittee shall conduct all future annual source tests for the #300 Sulfuric Acid Plant in accordance with the approved protocol or receive prior Department approval of a modified annual test protocol.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HE:JH-SIMPLOTJRSIM.PER

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

#400 Sulfuric Acid Plant and Associated Handling

1. SOURCE DESCRIPTION

- 1.1 Process Description This process involves making liquid sulfuric acid and transferring it to storage and loadout. The method used to make sulfuric acid at this facility is the "double contact process." Liquid sulfur is burned to make sulfur dioxide, which is catalytically oxidized to sulfur trioxide. Liquid sulfuric acid is formed by absorbing the sulfur trioxide in dilute sulfuric acid. Product is transferred by pipe to the product storage tanks. The plant is subject to NSPS.
- 1.2 Controls Emissions from the process are reduced because the plant is of double-contact design and is vented to a mist eliminator and then through No. 400 Stack.

2. EMISSION LIMITS2.1 Sulfuric Acid Plant No. 400 Stack

- 2.1.1 Sulfur dioxide emissions shall not exceed four (4) pounds per ton of 100% sulfuric acid produced, as required in 40 CFR 60.82 and 999 pounds per each running three-hour period (whichever is more restrictive), as determined by a U.S. EPA Reference Method 8, or Department-approved alternative emission test. Sulfur dioxide emission shall also not exceed the ton per year values (T/yr) given in Appendix A of this permit.
- 2.1.2 Sulfuric acid mist emissions shall not exceed 0.15 pounds per ton of 100% sulfuric acid produced, as required in 40 CFR 60.83, and 12.5 pounds per hour (whichever is more restrictive), as determined by a U.S. EPA Reference Method 8, or Department-approved alternative emission test. Sulfuric acid emissions shall also not exceed the ton per year (T/yr) value given in Appendix A of this permit.
- 2.1.3 Visible emissions shall not exceed ten percent (10%) opacity, as required in 40 CFR 60.83 and as determined using U.S. EPA Reference Method 9.

3. OPERATING REQUIREMENTS

- 3.1 The production rate shall be determined during the tests required in Section 4 below. The maximum production during the following year shall not exceed 105% of the rate achieved during the tests, unless the following conditions are met:
- 3.1.1 The SO₂ monitor is calibrated at least once every 24 hours, using certified test gases, one of which has a SO₂ concentration equal or less than the expected stack gas SO₂ concentration, and one of which has a SO₂ concentration greater than the expected stack gas SO₂ concentration.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HE34-SIMPLOT/RSW-PER

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

#400 Sulfuric Acid Plant and Associated Handling (Continued)

3.1.2 The calibrated SO₂ monitor is cross-checked and agrees with the initial performance test, which demonstrates SO₂ emission limit compliance.

3.1.3 Prior written approval by the Department is received.

3.1.4 An emission test is performed at the requested increased emission rate, and the test demonstrates that the continuous emission monitor is accurate at the increased rate.

3.1.5 Sulfur dioxide and acid mist emission limits will not be violated at the requested increased emission rates.

4. MONITORING REQUIREMENTS

- 4.1 Annual sulfur dioxide and sulfuric acid mist emission tests shall be performed using U.S. EPA Reference Methods 1, 2, 3, and 8, or Department-approved alternative methods. All emission tests shall be performed at the process equipment's maximum operating rate.
- 4.2 The permittee shall install, calibrate, maintain, and operate a continuous emission monitoring system for the measurement of sulfur dioxide, as described in 40 CFR 60.84 and 60.13. The accuracy of the monitoring results shall be in accordance with 40 CFR 60 Appendix B - Performance Specification 2.
- 4.3 Visible emissions shall be observed and recorded concurrently with the emission tests required in Section 4.1 above, using U.S. EPA Reference Method 9.
- 4.4 The permittee shall operate the SO₂ Monitors S1 and S7 in their present locations, as specified in 40 CFR 50 and 40 CFR 58. For specific methods and quality control, follow EPA's "Quality Assurance Handbook for Air Pollution Measurement Systems."
- 4.5 Annual audits of the monitors performance will be conducted by the Idaho Division of Environmental Quality or other auditors approved by the Department. Audit results will be sent in writing to the Department within forty-five (45) days after the audit and will be performed in accordance with 40 CFR 58.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HE:JH-SMPLTJ/ADM.PEN

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

#400 Sulfuric Acid Plant and Associated Handling (Continued)

5. REPORTING REQUIREMENTS

- 5.1 The results of all emission tests and visible emission data shall be reported to the Department in the Calendar-Quarterly Report. The Calendar-Quarterly Report shall be received by the Department no later than thirty (30) days after each calendar quarter. Continuous emission monitoring data and the production rates, determined during the tests, shall be reported to the Department with the emission test data.
- 5.2 All three-hour running average sulfur dioxide emissions shall be reported in a Calendar-Quarterly Report. The Calendar-Quarterly Report shall be received by the Department no later than thirty (30) days after each calendar quarter.
- 5.3 All repairs or changes to the Continuous Emission monitoring system and any calibration problems shall be reported within seven (7) days and in the quarterly report.
- 5.4 The permittee shall maintain on file for two (2) years all ambient air pollution and meteorological monitoring data collected in the Don Siding Area.
- 5.5 The permittee shall submit to the Department for approval an annual source test protocol for the #400 Sulfuric Acid Plant. The test protocol shall be submitted for the annual test conducted during the calendar year 1995 and shall be submitted to the Department no later than thirty (30) days prior to the date the test is scheduled to begin. Once the annual test protocol is approved by the Department, the permittee shall conduct all future annual source tests for the #400 Sulfuric Acid Plant in accordance with the approved protocol or receive prior Department approval of a modified annual test protocol.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

NRJH-SIMPLOT.URM.PER

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Reclaim Cooling Towers

1. SOURCE DESCRIPTION

- 1.1 Process Description This process involves cooling process water from the #400 Phosphoric Acid Plant in direct-contact cooling towers. There are three (3) cooling towers, consisting of eight (8) cells associated with this process.
- 1.2 Controls Each cooling tower contains a mist eliminator which reduces water droplets. By reducing the water droplets, the emissions of particulate matter and fluoride are reduced.

2. EMISSION LIMITS

- 2.1. Annual PM-10 and fluoride emissions from each cooling tower cells shall not exceed the pound per hour (lb/hr) or tons per year (T/yr) values given in Appendix A of this permit.

3. MONITORING REQUIREMENTS

- 3.1 Monitoring requirements for the sources in this section are listed in the Monitoring, Reporting, and Special Studies Section of this permit.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HE-24-SIMPLOT/RSIM.PER

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Gypsum Stack (Pile)

1. SOURCE DESCRIPTION

- 1.1 Process Description Slurried gypsum from the Phosphoric Acid Plant is combined with process water and flows to the gypsum thickener. Dewatered gypsum slurry is pumped to the Gypsum Stack (Pile). The thickened gypsum slurry is allowed to dry, leaving gypsum. Water used to transport gypsum to the Gypsum Stack is decanted and recycled. Dikes are continually built to increase the capacity of the Gypsum Stack.
- 1.2 Controls Emissions from the gypsum stack are reduced by the caking affect of the dried slurry. Emissions from the dike excavation on the gypsum stack are reduced by the moisture contained in the gypsum.

2. EMISSION LIMITS

- 2.1 Annual PM-10 and fluoride emissions shall not exceed the pound per hour (lb/hr) or tons per year (T/yr) values given in Appendix B of this permit.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

NEJH-SIMPLOTJRM.PER

AIR POLLUTION OPERATING PERMIT

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

PERMIT NUMBER

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Keeler, Foster-Wheeler and Combustion Engineering Boilers

1. SOURCE DESCRIPTION

- 1.1 Process Description All three boilers use natural gas as their only fuel. All three boilers are conventional package steam boilers.
- 1.2 Controls Emissions from each of these boilers are uncontrolled and vented through one stack each.

2. EMISSIONS LIMITS2.1 Keeler, Foster-Wheeler, and CE Boilers' Stacks

- 2.1.1 These boilers combined emissions of particulate, PM-10, carbon monoxide (CO), nitrogen oxides (NO_x), volatile organic compounds (VOC), and sulfur dioxide (SO₂) shall not exceed the pound per hour (lb/hr) or ton per year (T/yr) values given in Appendix A of this permit.
- 2.1.2 Visible emissions shall not exceed twenty percent (20%) opacity for more than three (3) minutes aggregate in any 60-minute period, as required in IDAPA 16.01.01.625 and as determined using the Department's "Procedures Manual for Air Pollution Control."

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HEP-SIMPLOT/BSM.PER

AIR POLLUTION OPERATING PERMIT

PERMIT NUMBER

PERMITTEE AND LOCATION

J. R. Simplot Company
Don Siding Complex

077 - 00006

The Permittee is hereby allowed to operate the equipment described herein subject to the emission limits and monitoring and reporting requirements specified in this permit.

SOURCE

Plant Roads

1. SOURCE DESCRIPTION

- 1.1 Process Description Routine vehicular traffic on plant roads.
- 1.2 Controls Paved roadways in the plant are cleaned by street sweeper on a regular basis.

2. EMISSIONS LIMITS2.1 Fugitive Emissions

- 2.1.1 Fugitive particulate and PM-10 emissions from plant roads shall be reasonably controlled, as required in IDAPA 16.01.01.650 and 16.01.01.651, and shall not exceed the pounds per hour (lb/hr) or tons per year (T/yr) values given in Appendix B of this permit.

3. OPERATING REQUIREMENTS

- 3.1 At all times, fugitive emissions shall be reasonably controlled by the following methods, but not limited to the following methods, and as required in IDAPA 01.650 and 01.651.
- 3.1.1 Using water sprays, chemicals, oils, and dust suppressants on the plant property and unpaved roads; and,
- 3.1.2 Routinely cleaning and maintaining all paved roads.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HEJd-SMPL07/MSM.PER

J. R. SIMPLOT COMPANY -- DON SIDING COMPLEXMONITORING, REPORTING AND SPECIAL STUDIES1. SOURCE TESTING REQUIREMENTS

- 1.1 Except as specifically required in the sections of this permit pertaining to the various processes, emission measurements and observations shall be made according to the schedule given in this section.
- 1.2 By December 15th of each year, the Permittee shall submit to the Department's Central Office, a tentative schedule of the source testing to be performed during the following calendar year.
- 1.3 The Permittee shall notify the Department's Field Office and Central Office in writing, no less than ten (10) working days in advance of the actual source testing date.
- 1.4 Emission tests shall be performed using methods specified in the Department's "Procedures Manual for Air Pollution Control" except that U.S. EPA Reference Method 9 shall be used for opacity observation of the Sulfuric Acid Plant No. 400 Stack.
- 1.5 The permittee shall submit to the Department for approval an annual test protocol for each source listed below which has an annual source test requirement associated with it. The test protocols shall be submitted for the annual tests conducted during the calendar year 1995. Each test protocol shall be submitted to the Department no later than thirty (30) days prior to the date on which the testing of the respective source is scheduled to begin. Once an annual test protocol is approved by the Department, the permittee shall conduct all future annual source tests for that particular source in accordance with the approved protocol or receive prior Department approval of a modified annual test protocol.

SOURCE	PARAMETER/FREQUENCY
Wet Process Phosphoric Acid Plant No. 400 Stack	PM-10/annually; Opacity/weekly and with PM-10 Test; Fluoride/annually
Granulation III Stack	PM-10/annually; Opacity/weekly and with PM-10 Test
Granulation I Stacks (3)	PM-10/annually; Opacity/weekly and with PM-10 Test; Fluoride/annually
Granulation II Stacks (2)	PM-10/annually; Opacity/weekly and with PM-10 Test; Fluoride/annually
Ammonia Plant Stacks	Opacity/weekly
Ammonia Sulfate Plant Stacks (2)	PM-10/annually; Opacity/weekly and with PM-10 Test
Nitric Acid Plant Stack	Nitrogen Oxides/annually
Reclaim Cooling Towers	PM-10/annually; Opacity with PM-10 Test; Fluoride/annually ^A

^A The permittee shall test one of the cooling tower cells in each of the three Reclaim Cooling Towers annually for PM-10 and fluoride emissions. The permittee shall select different cooling tower cells for testing from year to year until all of the cells within a particular cooling tower have been tested. Once all cells in a cooling tower have been tested, the cell selection process shall start again.

ISSUED: June 29, 1995
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2. REPORTING REQUIREMENTS FOR SOURCE TESTING

- 2.1 Submit written Calendar-Quarterly Reports to the Central Office within thirty (30) days after the end of each quarter.
- 2.2 Reports shall include the results of all the source testing performed during the calendar quarter. Weekly opacity readings for each source tested shall also be submitted as part of the quarterly report.
- 2.3 Complete data, regarding stack tests conducted, shall be submitted with the quarterly-report. This will include field, notes, calculations, data summary, lab data, etc. -- results on all three (3) runs for each source tested and the average of the three (3) runs.
- 2.4 The reports shall be submitted in units specified by the emission limitations.
- 2.5 List the "allowable" emissions for sources with test results.
- 2.6 The Permittee shall report process data for the same time period that the stack testing occurred. Include a brief explanation of how the process data was measured.

3. SPECIAL STUDIES

- 3.1 The Permittee shall obtain and keep on file for two (2) years the following process and equipment information:
 - 3.1.1 The throughput rates for each material flow direction and for each piece of process equipment.
 - 3.1.2 Monitoring of ambient fluoride in vegetation shall be conducted outside the Don Siding Complex at fifteen (15) different locations during the growing season. An air Ambient Monitoring Plan detailing quality assurance, procedures, sampling locations, method of collection, method of handling, method of laboratory analysis, sampling frequency, and reporting protocol shall be submitted to the Department for approval within 100 days after the issuance date of the Permit.

4. REPORTING REQUIREMENTS FOR AMBIENT MONITORING

- 4.1 The ambient fluoride results in vegetation monitoring data shall be submitted in an annual report to DEQ no later than December 31 of the calendar year in which the samples were collected. The data shall be reported in parts per million (ppm).
- 4.2 The Permittee shall maintain on file for two (2) years all fluoride in vegetation monitoring data collected in the Don Siding Area.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

HE-30-SAMPLING/ANAL PER

APPENDIX A

HOURLY AND ANNUAL POINT SOURCE EMISSION LIMITS

SOURCE	Particulates		CO		NO _x		VOC		SO ₂	
	lb/hr ^A	T/yr ^B	lb/hr	T/yr ^B	lb/hr	T/yr ^B	lb/hr ^C	T/yr ^C	lb/hr	T/yr
Wet Process Phosphoric Acid Plant No. 400 Stack	3.38 ^E	14.80 ^E								
Granulation III Stack	10.46	45.83	0.73 ^C	3.2	2.88 ^C	12.6				
Granulation I Stacks (3)	23.80	104.26	0.37 ^C	1.6	1.44 ^C	6.3			0.004 ^C	0.019 ^C
Granulation II Stacks (2)	22.02	96.47	0.41 ^C	1.8	1.69 ^C	7.4			0.0016 ^C	0.007 ^C
Ammonium Sulfate Plant Stacks (2)	2.44	10.68	0.07 ^C	0.3	0.25 ^C	1.1			0.0007 ^C	0.003 ^C
Extended Absorption Scrubber			4.2 ^K	18.3	0.1 ^K	0.4				
Ammonia Plant Stacks	1.8	7.9	26.7 ^C	117	67.8 ^C	297	28.5	125	0.07 ^C	0.3 ^C
Nitric Acid Plant Stack					F	37.5				
Sulfuric Acid Plant #300 Stack									G	1095 ^B
#400 Sulfuric Acid Plant Stack									H	1458 ^B
Keeler, Foster-Wheeler and CE Boiler Stacks	1.38	6.04	7.92 ^C	34.7	31.67 ^C	138.7	1.32	5.8	0.14	0.60
Reclaim Cooling Tower Cell	17.65	77.31								

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

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APPENDIX A (CONTINUED)

HOURLY AND ANNUAL POINT SOURCE EMISSION LIMITS

SOURCE	FL		RD	TRS		H ₂ SO ₄ P		PM-10	
	Fluoride		Rad	Total Reduced Sulfur		Sulfuric Acid Mist			
	lb/hr ^D	T/yr ^B	Ci/yr ^C	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Wet Process Phosphoric Acid Plant No. 400 Stack	1.3 ^E	4.71 ^E	0.020	8.61	37.7			2.77 ^I	12.13 ^B
Granulation III Stack	1.7	7.45	0.017					8.58 ^I	37.57 ^B
Granulation I Stacks (3)	7.8	34.16	0.011					19.52 ^I	85.48 ^B
Granulation II Stacks (2)	6.8	29.78	0.019					18.06 ^I	79.12 ^B
Ammonium Sulfate Plant Stacks (2)								2.0 ^I	8.76 ^B
Ammonia Plant Stacks								1.8 ^C	7.9 ^C
Nitric Acid Plant Stack									
Sulfuric Acid Plant #300 Stack						9.4	41.1 ^B		
#400 Sulfuric Acid Plant Stack						12.5	54.8 ^B		
Keeler, Foster-Wheeler and CE Boiler Stacks								1.13	4.93
Reclaim Cooling Tower Cell	4.9	21.70						3.53 ^I	15.48

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

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FOOTNOTES FOR APPENDIX A

- A. As determined by a U.S. EPA Reference Method 5, or Department-approved alternative emission testing method.
- B. As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the actual hours per year that the process(es) which vent to this stack operate(s).
- C. As determined by the Department's emission estimation methods used in the J.R. Simplot plant expansion permit application analysis.
- D. As determined by a U.S. EPA Reference Method 13A or 13B, or Department-approved alternative emission testing method.
- E. See the section entitled "Wet Process Phosphoric Acid Plant No. 400" for additional particulate emission limits.
- F. See the section entitled "Nitric Acid Plant Stacks" for additional emission limits.
- G. See the section entitled "Sulfuric Acid Plant No. 3 Stack" for additional emission limits.
- H. See the section entitled "#400 Sulfuric Acid Plant Stack" for additional emission limits.
- I. As determined by sampling for particulate matters (PM) using EPA Reference Method 5, and multiplying the PM test results by a PM-10/PM factor of 0.82 (the PM-10/PM factor used in the development of the PM-10 Air Quality Improvement Plan for Power and Bannock Counties dated May 1993).
- J. As determined by sampling the cooling tower effluent air stream for Particulates using U.S. EPA Reference Method 5, or Department-approved alternative, and multiplying the Particulates test result by a PM-10/Particulates factor of 0.20 (the PM-10/Particulates factor used for the cooling towers in the development of the PM-10 Air Quality Improvement Plan for Power and Bannock Counties dated May 1993).
- K. As determined by a pollutant specific promulgated U.S. EPA Method, or Department-approved alternative, or as determined by the Department's emission estimation methods used in the "Extended Absorption Scrubber" Permit to Construct (April 17, 1990) analysis.

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APPENDIX B

HOURLY AND ANNUAL FUGITIVE EMISSION LIMITS

SOURCE	Particulates		Fluoride		Rad	PM-10 ^B	
	lb/hr ^A	T/yr ^A	lb/hr ^A	T/yr ^A	Ci/yr ^A	lb/hr	T/yr
Wet Process Phosphoric Acid Plant No. 400 Stack						0.01	0.03
Granulation III Plant and Associated Handling	3.58	15.67	0.036	0.16	0.003	1.66	7.27
Granulation I and Associated Handling	7.03	30.78	0.070	0.308	0.003	2.54	11.12
Granulation II and Associated Handling	8.79	38.49	0.088	0.385	0.019	1.06	4.63
Ammonium Sulfate Plant and Associated Handling	2.52	11.04				0.90	3.92
Superphosphoric Acid Plant and Associated Handling			0.37	1.62			
Gypsum Stack (Pile)			17.50	76.65		4.30	18.84
Plant Roads	3.12	13.65				1.94	8.48

^A As determined by the Department's emission estimation methods used in J.R. Simplot's plant expansion permit application analysis.

^B As determined from the PM-10 Air Quality Improvement Plan for Power and Bannock Counties dated May, 1993.

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EXPIRES: June 29, 2000

IE/pe-SIMPLOT/PSIM.PER

OPERATING PERMIT GENERAL PROVISIONS

- A. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code 39-101 et. seq.
- B. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.
- C. The permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:
- 1) To enter upon the permittee's premises where an emission source is located, or in which any records are required to be kept under the terms and conditions of this permit; and
 - 2) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and to require stack emission testing (i.e., performance tests) in conformance with state approved or accepted EPA procedures when deemed appropriate by the Director.
- D. Except for data determined to be confidential under Section 39-111, Idaho Code, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of the Division of Environmental Quality.
- E. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
- F. In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director.
- G. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within sixty (60) days after receipt of the Director's request shall cause the permit to be voided.
- H. The Director may require the permittee to develop a list of Operation and Maintenance Procedures which must be approved by the Department. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.

ISSUED: June 29, 1995
EXPIRES: June 29, 2000

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- I. The permittee shall provide the Department a minimum of thirty (30) days notice prior to the scheduled date of any performance test required pursuant to this permit. Such testing must strictly adhere to the procedures outlined in the Department's Procedures Manual for Air Pollution Control, and will not be conducted on weekends or state holidays, unless the permittee obtains prior Department approval. Testing procedures and specific time limitations may be modified by the Department by prior negotiation if conditions warrant adjustment.

The permittee shall promptly notify the Department of any change in the testing schedule and shall provide at least five (5) working days notice prior to conducting any rescheduled test, unless the Department approves a shorter advanced notice period. Any records or data generated as a result of such performance tests shall be made available to the Department upon request.

The performance tests will be performed at the maximum production rate unless otherwise is specifically stated elsewhere in this Operating Permit. If this maximum rate is not achieved during testing, the allowable production rate will be limited to the production rate attained during testing.

- J. The provisions of this permit are severable; and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

ISSUED: June 29, 1995 EXPIRES: June 29, 2000

NE-30-SMPLDT/PSM.PER